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SEQUENCE LISTING

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BOLES, KENT S.

<120> LLT USES THEREOF IN IMMUNE SYSTEM MODULATION

<130> 40170.3US01

<140> 09/475,365

<141> 1999-12-30

<160> 10

<170> PatentIn Ver. 2.1

<210> 1

<211> 29

<212> PRT

<213> Homo sapiens

<400> 1

Lys Ala Thr Leu Ile Trp Arg Leu Phe Phe Leu Ile Met Phe Leu Thr
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Ile Ile Val Cys Gly Met Val Ala Ala Leu Ser Ala Ile
20 25

<210> 2

<211> 191

<212> PRT

<213> Homo sapiens

<400> 2

Met His Asp Ser Asn Asn Val Glu Lys Asp Ile Thr Pro Ser Glu Leu
1 5 10 15

Pro Ala Asn Pro Gly Cys Leu His Ser Lys Glu His Ser Ile Lys Ala
20 25 30

Thr Leu Ile Trp Arg Leu Phe Phe Leu Ile Met Phe Leu Thr Ile Ile
35 40 45

Val Cys Gly Met Val Ala Ala Leu Ser Ala Ile Arg Ala Asn Cys His
50 55 60

Gln Glu Pro Ser Val Cys Leu Gln Ala Ala Cys Pro Glu Ser Trp Ile
65 70 75 80

Gly Phe Gln Arg Lys Cys Phe Tyr Phe Ser Asp Asp Thr Lys Asn Trp
85 90 95

Thr Ser Ser Gln Arg Phe Cys Asp Ser Gln Asp Ala Asp Leu Ala Gln
100 105 110

Val Glu Ser Phe Gln Glu Leu Asn Phe Leu Leu Arg Tyr Lys Gly Pro
115 120 125

Ser Asp His Trp Ile Gly Leu Ser Arg Glu Gln Gly Gln Pro Trp Lys
130 135 140

Trp Ile Asn Gly Thr Glu Trp Thr Arg Gln Phe Pro Ile Leu Gly Ala
145 150 155 160

Gly Glu Cys Ala Tyr Leu Asn Asp Lys Gly Ala Ser Ser Ala Arg His
165 170 175

Tyr Thr Glu Arg Lys Trp Ile Cys Ser Lys Ser Asp Ile His Val
180 185 190

<210> 3

<211> 30

<212> PRT

<213> Homo sapiens

<400> 3

Met His Asp Ser Asn Asn Val Glu Lys Asp Ile Thr Pro Ser Glu Leu
1 5 10 15

Pro Ala Asn Pro Gly Cys Leu His Ser Lys Glu His Ser Ile
20 25 30

<210> 4

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4

Arg Ala Asn Cys His Gln Glu Pro Ser Val Cys Leu Gln Ala Ala Cys
1 5 10 15

Pro Glu Ser Trp Ile Gly Phe Gln Arg Lys Cys Phe Tyr Phe Ser Asp
20 25 30

Asp Thr Lys Asn Trp Thr Ser Ser Gln Arg Phe Cys Asp Ser Gln Asp
35 40 45

Ala Asp Leu Ala Gln Val Glu Ser Phe Gln Glu Leu Asn Phe Leu Leu
50 55 60

Arg Tyr Lys Gly Pro Ser Asp His Trp Ile Gly Leu Ser Arg Glu Gln
65 70 75 80

Gly Gln Pro Trp Lys Trp Ile Asn Gly Thr Glu Trp Thr Arg Gln Phe
85 90 95

Pro Ile Leu Gly Ala Gly Glu Cys Ala Tyr Leu Asn Asp Lys Gly Ala
100 105 110

Ser Ser Ala Arg His Tyr Thr Glu Arg Lys Trp Ile Cys Ser Lys Ser
115 120 125

Asp Ile His Val
130

<210> 5
<211> 850
<212> DNA
<213> Homo sapiens

<400> 5
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gcgcttattt ttcttaataca tgtttctgac aatcatagtg tgtggaatgg ttgctgcttt 180
aagcgcaata agagctaact gccatcaaga gccatcagta tgtcttcaag ctgcatgccc 240
agaaagctgg attggttttc aaagaaaagt tttctatttt tctgatgaca ccaagaactg 300
gacatcaagt cagagggttt gtgactcaca agatgctgat cttgctcagg ttgaaagctt 360
ccaggaactg aatttcctgt tgagatataa aggcccatct gatcactgga ttgggctgag 420
cagagaacaa ggccaaccat ggaaatggat aaatgggtact gaatggacaa gacagtttcc 480
tatcctggga gcaggagagt gtgcctattt gaatgacaaa ggtgccagta gtgccaggca 540
ctacacagag aggaagtggg tttgttccaa atcagatata catgtctaga tgttacagca 600
aagccccaac taatcttttag aagcatattg gaactgataa ctccatttta aaatgagcaa 660
agaatttatt tcttatacca acaggatatat gaaaatatgc tcaatatcac taataactgg 720
gaaaatacaa atcaaaatca tagtaaaata ttacctgtt tcatgggtgct aatattacct 780
gttctccac tgctaattgac atacccgaga atgagtaatt tataaataaa agagatttaa 840
ttgaaaaaaa 850

<210> 6
<211> 149
<212> PRT
<213> Homo sapiens

<400> 6
Met Met Thr Lys His Lys Lys Cys Phe Ile Ile Val Gly Val Leu Ile
1 5 10 15
Thr Thr Asn Ile Ile Thr Leu Ile Val Lys Leu Thr Arg Asp Ser Gln
20 25 30
Ser Leu Cys Pro Tyr Asp Trp Ile Gly Phe Gln Asn Lys Cys Tyr Tyr
35 40 45
Phe Ser Lys Glu Glu Gly Asp Trp Asn Ser Ser Lys Tyr Asn Cys Ser
50 55 60
Thr Gln His Ala Asp Leu Thr Ile Ile Asp Asn Ile Glu Glu Met Asn
65 70 75 80
Phe Leu Arg Arg Tyr Lys Cys Ser Ser Asp His Trp Ile Gly Leu Lys
85 90 95
Met Ala Lys Asn Arg Thr Gly Gln Trp Val His Gly Ala Thr Phe Thr
100 105 110
Lys Ser Phe Gly Met Arg Gly Ser Glu Gly Cys Ala Tyr Leu Ser Asp
115 120 125

Asp Gly Ala Ala Thr Ala Arg Cys Tyr Thr Glu Arg Lys Trp Ile Cys
130 135 140

Arg Lys Arg Ile His
145

<210> 7

<211> 199

<212> PRT

<213> Homo sapiens

<400> 7

Met Ser Ser Glu Asn Cys Phe Val Ala Glu Asn Ser Ser Leu His Pro
1 5 10 15

Glu Ser Gly Gln Glu Asn Asp Ala Thr Ser Pro His Phe Ser Thr Arg
20 25 30

His Glu Gly Ser Phe Gln Val Pro Val Leu Cys Ala Val Met Asn Val
35 40 45

Val Phe Ile Thr Ile Leu Ile Ile Ala Leu Ile Ala Leu Ser Val Gly
50 55 60

Gln Tyr Asn Cys Pro Gly Gln Tyr Thr Phe Ser Met Pro Ser Asp Ser
65 70 75 80

His Val Ser Ser Cys Ser Glu Asp Trp Val Gly Tyr Gln Arg Lys Cys
85 90 95

Tyr Phe Ile Ser Thr Val Lys Arg Ser Trp Thr Ser Ala Gln Asn Ala
100 105 110

Cys Ser Glu His Gly Ala Thr Leu Ala Val Ile Asp Ser Glu Lys Asp
115 120 125

Met Asn Phe Leu Lys Arg Tyr Ala Gly Arg Glu Glu His Trp Val Gly
130 135 140

Leu Lys Lys Glu Pro Gly His Pro Trp Lys Trp Ser Asn Gly Lys Glu
145 150 155 160

Phe Asn Asn Trp Phe Asn Val Thr Gly Ser Asp Lys Cys Val Phe Leu
165 170 175

Lys Asn Thr Glu Val Ser Ser Met Glu Cys Glu Lys Asn Leu Tyr Trp
180 185 190

Ile Cys Asn Lys Pro Tyr Lys
195

<210> 8

<211> 216

<212> PRT

<213> Homo sapiens

<400> 8

Met Gly Trp Ile Arg Gly Arg Arg Ser Arg His Ser Trp Glu Met Ser
 1 5 10 15

Glu Phe His Asn Tyr Asn Leu Asp Leu Lys Lys Ser Asp Phe Ser Thr
 20 25 30

Arg Trp Gln Lys Gln Arg Cys Pro Val Val Lys Ser Lys Cys Arg Glu
 35 40 45

Asn Ala Ser Pro Phe Phe Phe Cys Cys Phe Ile Ala Val Ala Met Gly
 50 55 60

Ile Arg Phe Ile Ile Met Val Ala Ile Trp Ser Ala Val Phe Leu Asn
 65 70 75 80

Ser Leu Phe Asn Gln Glu Val Trp Ile Pro Leu Thr Glu Ser Tyr Cys
 85 90 95

Gly Pro Cys Pro Lys Asn Trp Ile Cys Tyr Lys Asn Asn Cys Tyr Gln
 100 105 110

Phe Phe Asp Glu Ser Lys Asn Trp Tyr Glu Ser Gln Ala Ser Cys Met
 115 120 125

Ser Gln Asn Ala Ser Leu Leu Lys Val Tyr Ser Lys Glu Asp Gln Asp
 130 135 140

Leu Leu Lys Leu Val Lys Ser Tyr His Trp Met Gly Leu Val His Ile
 145 150 155 160

Pro Thr Asn Gly Ser Trp Gln Trp Glu Asp Gly Ser Ile Leu Ser Pro
 165 170 175

Asn Leu Leu Thr Ile Ile Glu Met Gln Lys Gly Asp Cys Ala Leu Tyr
 180 185 190

Ala Ser Ser Phe Lys Gly Tyr Ile Glu Asn Cys Ser Thr Pro Asn Thr
 195 200 205

Tyr Ile Cys Met Gln Arg Thr Val
 210 215

<210> 9

<211> 260

<212> PRT

<213> Homo sapiens

<400> 9

Met Thr Glu Gln Glu Asp Thr Phe Ser Ala Val Arg Phe His Lys Ser
 1 5 10 15

Ser Gly Leu Gln Asn Glu Met Arg Leu Lys Glu Thr Arg Lys Pro Glu
 20 25 30

Lys Ala Arg Leu Arg Val Pro Trp Gln Leu Ile Val Ile Ala Leu Gly
 35 40 45

Ile Leu Ile Ser Leu Arg Leu Val Thr Val Ala Val Leu Met Thr Asn
 50 55 60
 Glu Cys Asn Leu Leu Glu Ser Leu Asn Arg Asp Gln Asn Ile Leu Cys
 65 70 75 80
 Asp Lys Thr Arg Thr Val Leu Asp Tyr Leu Gln His Thr Gly Arg Gly
 85 90 95
 Val Lys Val Tyr Trp Phe Cys Tyr Ile Phe Gln Tyr Gly Gln Gln Lys
 100 105 110
 His Glu Leu Lys Glu Phe Leu Lys His His Asn Asn Cys Ser Ile Met
 115 120 125
 Gln Ser Asp Ile Asn Leu Lys Asp Glu Leu Leu Lys Asn Lys Ser Ile
 130 135 140
 Gly Met Lys Cys Tyr Tyr Phe Val Met Asp Arg Lys Pro Trp Ser Arg
 145 150 155 160
 Cys Lys Gln Ser Cys Gln Asn Ser Ser Leu Thr Leu Leu Lys Ile Asp
 165 170 175
 Asp Glu Asp Glu Leu Lys Phe Leu Gln Leu Val Val Pro Ser Asp Ser
 180 185 190
 Cys Trp Ile Gly Leu Ser Tyr Asp Asn Lys Lys Lys Asp Trp Ala Trp
 195 200 205
 Ile Asp Asn Arg Pro Ser Lys Leu Ala Leu Asn Thr Thr Lys Tyr Asn
 210 215 220
 Ile Arg Asp Gly Gly Cys Met Phe Leu Ser Lys Thr Arg Leu Asp Asn
 225 230 235 240
 Asn Tyr Cys Asp Gln Ser Phe Ile Cys Ile Cys Gly Lys Arg Leu Asp
 245 250 255
 Lys Phe Pro His
 260

<210> 10
 <211> 179
 <212> PRT
 <213> Homo sapiens

<400> 10
 Met Ala Val Phe Lys Thr Thr Leu Trp Arg Leu Ile Ser Gly Thr Leu
 1 5 10 15
 Gly Ile Ile Cys Leu Ser Leu Met Ala Thr Leu Gly Ile Leu Leu Lys
 20 25 30
 Asn Ser Phe Thr Lys Leu Ser Ile Glu Pro Ala Phe Thr Pro Gly Pro
 35 40 45

Asn Ile Glu Leu Gln Lys Asp Ser Asp Cys Cys Ser Cys Gln Glu Lys
50 55 60

Trp Val Gly Tyr Arg Cys Asn Cys Tyr Phe Ile Ser Ser Glu Gln Lys
65 70 75 80

Thr Trp Asn Glu Ser Arg His Leu Cys Ala Ser Gln Lys Ser Ser Leu
85 90 95

Leu Gln Leu Gln Asn Thr Asp Glu Leu Asp Phe Met Ser Ser Ser Gln
100 105 110

Gln Phe Tyr Trp Ile Gly Leu Ser Tyr Ser Glu Glu His Thr Ala Trp
115 120 125

Leu Trp Glu Asn Gly Ser Ala Leu Ser Gln Tyr Leu Phe Pro Ser Phe
130 135 140

Glu Thr Phe Asn Thr Lys Asn Cys Ile Ala Tyr Asn Pro Asn Gly Asn
145 150 155 160

Ala Leu Asp Glu Ser Cys Glu Asp Lys Asn Arg Tyr Ile Cys Lys Gln
165 170 175

Gln Leu Ile